# USAID OFFICE IN NANGGROE ACEH DARUSSALAM (NAD)
# GOVERNOR'S OFFICE BUILDING, BANDA ACEH, NAD
# "BACK-UP POWER SYSTEM"
# STATEMENT OF WORK

## A. General

1. The Contractor shall provide services for design and engineering/study **"Back-up Power System"** for the whole compound of the Governor's office, Banda Aceh, Nanggroe Aceh Darussalam (NAD) for a total of 1,000 KVA power requirement with 3 (three) unit back-up Generator Sets.

2. The Contractor shall provide and install these Generator Sets according to specifications to include all required Components, Synchronize Panel & AMF/ATS, required Transformer at 1,500 KVA, Medium Voltage Cubicle and Wiring Interconnection up to the Main Distribution Panel (MDP) under the direction/coordination of USAID Cognizant Technical Officer (CTO).

3. The Contractor shall fabricate the required Control Panels in their own workshop which is supported by modern testing facility or Laboratory for electrical testing purposes.

4 The Contractor shall furnish all equipment and tools required for the proper installation.

5. The Contractor is responsible for the "Means and Methods" of the fabrication / installation of the Panels and the Generators and the Wiring Interconnection in the Power House. He shall be responsible for adequately shoring and protecting all work during installation against damage, breakage or other similar problems. He shall also be responsible for implementing job site safety.

6. The Contractor shall survey for the actual field measurement and verify adequacy of the site to the CTO.

7. The Government estimates that value of this procurement is between $500,000 to $700,000.

## B. The Contractor shall provide the following services:

1. Provide and install complete package of 3 (three) units open type Generator Sets @ 635 KVA.

2. Provide and install required Panels with Auto Synchronizing Control System for these Generator Sets @ 635 KVA and be able to be synchronized with PLN Power Grid. The Control Panels must have the capability / must be equipped with:

   - AMF, with auto start within 8 seconds and shutdown capability.

- Load sharing capability to divide load evenly with "Master" and "Slave" capability.
- ATS, with auto/manual selection.
- Protection Relays; Over/Under Voltage/Frequency/Current/Ground Fault/Reverse Power Relay, and Phase Unbalancing Protection.
- Capability for Remote Control Access via Internet.
- Ready for future additional Capacitor Bank.
- Ready for future Extension of Power Capacity upgrade.

3. Provide and install required Transformer of 1,500 KVA with Cable MV 20KV.

4. Provide and install required MV Cubicle.

5. Provide and Install interconnection Wiring in Power House up to Main Distribution Panel (MDP), Over-head Cable Ladder and all required Accessories.

6. Commissioning service during the Warranty period.

7. Training course for the operators.

Note:
- All Generator Sets, Panel LV and MV, and Transformer must be grounded properly using Solid Copper Bar with Box for future inspection.
- All Cable Termination and Transformer must be "Certified by PLN" at site before commissioning.

## C. Material Specifications

1. All 3 (three) unit Generator Sets shall be open generator type "Caterpillar C18 DITA-ATAAC (Direct Injection Turbocharged After Cooled - Air to Air After Cooled) Packaged Generator Set" or similar, original and supplied by Authorized Distributor, arranged for 635 KVA prime rating © 0.8 PF with fan, 400 Volt, 3 Phase, complete with Exhaust system and Ducting/Flexible Discharge for Radiator.

2. Control Panel Boxes:
   - Panel-boxes made from steel plate with minimum thickness of 2 mm, Hot dip Galvanized, and finished with minimum 80 micron thickness of powder coating.
   - Main Distribution Panel shall have Volt and Ampere Meters for each phase and one Main Breaker. Other components such as MCCB for each Sub Distribution Panel will be provided and installed by Pemda Aceh.

3. Transformer of 1,500 KVA shall have the capability for easy synchronizing with the Generators.

4. All other Bills of Material and Specifications shall be according to the approved design and in compliance with American "National Electric Code".

**D. Delivery and Fabrication**

1. Shipment of Generator Sets should be received on site within four (4) weeks after award of contract.
2. Fabrication of Control Panels shall not be longer than five (5) weeks after award of contract.

**E. Inspection and Acceptance**

1. Inspection by USAID's CTO (Cognizant Technical Officer) will be made prior to assembling the components into the empty Panel Boxes and prior to delivery to Banda Aceh.

2. All installed materials will be accepted in compliance with all specifications stated in the approved proposal.

3. All Panels must be synchronized prior to shipment to ensure all system work correctly and witnessed by USAID's CTO for approval.

**F. Warranty**

1. Warranty period for Generator Sets and all installed components shall be a minimum of one (1) Year.
2. Delivery of broken replacement Parts (if any) shall not be longer than eight (8) hours after notification of problem.

**G. Commissioning and Testing**

1. Commissioning and Testing for running the Generator Sets without load shall be done for not less than four (4) hours before testing with load.
2. Commissioning and Testing shall be carried out a minimum of 2 weeks before hand-over.
3. Commissioning service during the warranty period shall be in affect.

**H. Training for the local operators**

1. Training course for the operators of the Back-up Power System must be implemented during the commissioning test until the operator have sufficient knowledge to operate the System and carry out the necessary maintenance procedures.

2. Manual Operating Procedures and Wiring Diagrams should be provided in laminated sheets, hanging on the Control Panel Boxes.

**I. Performance Schedule of Contractor**

1. Mobilization and material procurement: December 30, 2005
2. Fabrication of Control Panels: January 02, 2006 to February 06, 2006
3. Generator Sets on site: January 31, 2006
4. Control Panels and other required Components on site: February 15, 2006

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| 5. | Installation Generators and Control Panels: | February 01, 2006 to February 28, 2006 |
| 6. | Testing + operation: | March 01, 2006 to March 15, 2006 |
| 7. | Training: | March 02, 2006 to March 15, 2006 |
| 8. | Formal Hand-over: | March 16, 2005 |

Note: Contractor shall adhere to the above Performance Schedule and all Bid Prices and Proposal shall reflect this schedule.

## J. Procurement Schedule

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| 1. | Solicitation issuance: | December 05, 2005 |
| 2. | Closing date of Proposal: | December 19, 2005 – 10: a.m. Jakarta time |
| 3. | Evaluation of Proposal: | December 20, 2005 |
| 4. | Selection of successful Contractor: | December 22. 2005 |
| 5. | Factory workshop visit: | December 27, 2005 |
| 6. | Contract award: | December 29, 2005 |

## K. Evaluation Criteria

The Government will select a contractor whose proposal offers the best value to the Government. Best value (FAR 2.101 definitions) means the expected outcome of an acquisition that, in the Government's estimation, provides the greatest overall benefit in response to the requirement.
The trade-off process (FAR.15.101-1) will be utilized in selection of the contractor. For this procurement, technical proposal merits are considered significantly more important than cost relative to deciding who best might perform the work. Cost realism and reasonableness will, however, be important criteria and may be the determining factor in the event that the proposals receiving the highest ratings are closely ranked. Therefore, after the final evaluation of the proposals, the Contracting Officer will make the award to the offeror whose proposal offers the best value to the Government considering both technical and cost factors.

Technical, cost and other factors will be evaluated relative to each other, as described herein.

1 The technical proposal will be scored by a technical evaluation committee using the criteria shown in this section.

2 The cost proposal will be scored using a best value to the government method set forth in FAR 2.01.

3 The criteria below are presented by major category, with relative order of importance, so that offerors will know which areas require emphasis in the preparation of proposals. The criteria below reflect the requirements of this particular solicitation. Offerors should note that these

(a) Serve as the standard against which all proposals will be evaluated, and
(b) Serve to identify the significant matters which offerors should address in their proposal.

4 Prospective offerors are forewarned that a proposal with the lowest estimated cost may not be selected if award to higher priced proposal affords the Government a greater overall benefit. All evaluation factors other than cost or price, when combined, are significantly more important than cost or price. However, estimated cost is an important factor and the estimated cost to the Government increases in importance as competing proposal approach equivalence and may become the deciding factor when technical proposals are approximately equivalent in merit.

5 Cost estimates will be analyzed as part of the total proposal evaluation process.

6. The Government reserves the right to make award without discussions.

| | Points |
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| **A) Experience and Capability of Offeror (Past Performance)** | **40** |
| Demonstrate success of the Offeror's experience and capability in providing similar services on past contracts in the last five years, including satisfaction of past clients with the offeror's services. Demonstration of past performance should include complete descriptions of work completed similar to this solicitation, and contact information for the client. This contact info should include names, phone numbers, e-mail and addresses. A minimum of 3 past performance experiences should be presented. | |
| **B) Technical Approach and Responsiveness of proposal** | **30** |
| Demonstrate Offeror's understanding of requirements, clarity, and creativity of proposed approach to meeting delivery schedule proposed in the RFP, to include understanding of required material specification in accordance to American "National Electric Code". | |
| **C) Schedule** | **30** |
| Offeror's capability and assurance in meeting the Performance Schedule. Also providing after sales services during the warranty period and after; and Offeror's capability in providing required replacements of spare parts within 8 (eight) hours upon notification of a problem. | |

---------- END OF STATEMENT OF WORK ----------